

Name : .....  
Roll No. : .....  
Invigilator's Signature : .....

**CS/B.TECH (IT)/SEM-8/IT-802B/2013  
2013**

**BUSINESS INFORMATION SYSTEMS**

Time Allotted : 3 Hours

Full Marks : 70

*The figures in the margin indicate full marks.  
Candidates are required to give their answers in their own words  
as far as practicable.*

**GROUP - A**

**( Multiple Choice Type Questions )**

1. Choose the correct alternatives for the following :

10 × 1 = 10

- i) MVS stands for
  - a) Multiple Variable Storage
  - b) Multi-Virtual System
  - c) Multiple Virtual System
  - d) Multiple Virtual Storage.



ii) A mainframe DASD is a / an

- a) Input device
- b) Output device
- c) Storage device
- d) none of these.

iii) COND = ONLY in JCL means that

- a) step will be executed if previous step is successful
- b) step will not be executed at all
- c) step will be executed only if previous step abends
- d) none of these.

iv) The different VSAM datasets are

- a) LDS, ESDS
- b) ESDS, KSDS, RRDS
- c) LDS, ESDS, RRDS, KSDS
- d) PDS, ESDS, LDS, KSDS.

v) The divisions in COBOL are

- a) Identification
- b) Data
- c) Procedure & Environment
- d) All of these
- e) none of these



- vi) VSAM datasets are organized in
- a) CI & CA
  - b) only CI
  - c) only CA
  - d) none of these.
- vii) IDCAMS utility is used to
- a) Create & load VSAM datasets
  - b) Create PDS & sequential dataset
  - c) Run JCL
  - d) Run COBOL & DBL program.
- viii) JOBLIB & STEPLIB is used in
- a) COBOL programs
  - b) VSAM programs
  - c) JCL
  - d) None of these.
- ix) MVS supports
- a) Multiprocessing
  - b) Multitasking
  - c) Spooling
  - d) all of these.
- x) SEARCH ALL verb in COBOL
- a) Performs linear search
  - b) Performs binary search
  - c) Works on indexed tables
  - d) Both (b) and (c).



**GROUP - B**

**( Short Answer Type Questions )**

Answer any *three* of the following.  $3 \times 5 = 15$

2. Write down the steps for executing a COBOL-DBL program.5
3. What are control interval and control area ? What are CIDEF and RDF ? 3 + 2
4. Write down the procedure division statement for merging two files. Is there any precondition ? 3 + 2
5. Discuss the different uses of PERFORM verb.
6. Write an FD entry for a file with following specifications :
  - i) File is to be referred in program as MYFILE.
  - ii) File contains 120 characters in each record.
  - iii) The blocking factor is 15
  - iv) The record is of fixed length.
7. What is the difference between a subscript and index ?



**GROUP - C**

**( Long Answer Type Questions )**

Answer any *three* of the following.  $3 \times 15 = 45$

8. a) Calculate the size of the items — SALARY, JOIN-DATE-R, EMPLOYEE.

```

01 EMPLOYEE
02 EMPNO          PIC 9 ( 6 )
02 ENAME          PIC X ( 20 )
02 DEPT           PIC 9 ( 4 )
02 SALARY
    03 BASIC      PIC 9 ( 4 ) V99.COMP-3
    03 DA         PIC 9 ( 2 ) V99
    03 HRA        PIC 9 ( 2 ) V99
02 JOIN-DATE
    03 DAY        PIC 99
    03 MONTH      PIC 99
    03 YEAR       PIC 99.
02 JOIN-DATE-R REDEFINES JOIN-DATE.      7
    
```

- b) Using evaluate rewrite the following IF statement :

```

IF HRS-WORKED > 20
    MOVE 0.3 TO COMM
ELSE
IF HRS-WORKED > 15
    MOVE 0.2 TO COMM
ELSE
IF HRS-WORKED > 10
    MOVE 0.1 TO COMM
ELSE
    MOVE 0 TO COMM
END-IF
    
```

END-IF  
END-IF. 8



9. a) Write a JCL to copy a sequential file to another dataset. 6
- b) Write a COBOL program to accept 10 numbers and calculate the maximum, minimum and average of them.

9

10. Create a DATA division entry for the following file statement :

<b>Col No.</b>	<b>Field</b>
1 – 6	Reg. No.
7	Year
8 – 40	Student name
41 – 42	Age

Read this input file and create an output file like this :

<b>Year</b>	<b>No. of Students</b>
1	xx
2	yy
3	zz
4	aa

Write only DATA division and procedure division statements.



11. a) Consider the following table definition :

01 PERSONNEL-TABLE

02 PERSONNEL-INFO OCCURS 100 TIMES

03 PERSONNEL-NO PIC 9 ( 3 )

03 NAME

04 F-NAME PIC X ( 20 )

04 L-NAME PIC X ( 15 )

03 INCOME PIC 9 ( 5 )

i) What is the size of PERSONNEL-TABLE ( in bytes ) ? 3

ii) Write PROCEDURE DIVISION statements :

a) to find how many persons are there whose L-NAME is 'SHARMA'. 3

b) to find how many persons are there whose L-NAME is "MITRA" and income is more than Rs. 15000. 3

b) Write a JCL to compile, link edit and run and COBOL program. 6

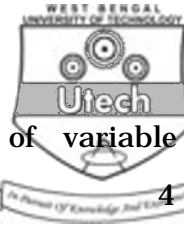
12. a) Discuss when the following clauses are used : 4

i) AT END

ii) ROUNDED

iii) INVALID KEY

iv) FILE STATUS.



b) What will happen to the contents of variable A when - 123.06 is moved in each case. 4 × 2

i) A PIC S9 ( 4 ) V 9 ( 3 )

ii) A PIC 9 ( 3 ) . 9 ( 2 )

iii) A PIC + 9 ( 5 ) . 9 ( 4 )

iv) A PIC -Z9 ( 4 ) . 9 ( 2 ) .

c) What are JCL procedures ? How does it differ from a main JCL ? 3

13. Write a JCL utility to

a) Create VSAM KSDS ( IDCAMS ) 4

b) Load VSAM ESDS ( IDCAMS ) 3

c) Copy one file to another ( IEBCOPY ) 4

d) Compare contents of two files ( IEBCOMPR ). 4

